

General Information

Primary Accession # AJ272027  
 Accession # AJ272027  
 Entry Name EMBL:ATH272027  
 Molecule Type genomic DNA  
 Sequence Length 5340  
 Entry Division PLN  
 Sequence Version AJ272027.1  
 Creation Date 09-FEB-2000  
 Modification Date 25-AUG-2000

XP-002307112

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Description

Description Arabidopsis thaliana oasA1 gene for O-acetylserine (thiol) lyase A1, exons 1-11  
 Keywords O-acetylserine (thiol) lyase A1  
 Organism Arabidopsis thaliana (thale cress)  
 Organism Eukaryota  
 Classification

References

- Hell,R.;  
 Submitted (08-FEB-2000) to the EMBL/GenBank/DDBJ databases. Hell R., Molecular Cell Biology, Institute for Plant Genetics and Crop Plant Research, Corrensstrasse 3, 06466 Gatersleben, GERMANY.  
 Position 1-5340
- Jost,R.; Berkowitz,O.; Wirtz,M.; Hopkins,L.; Hawkesford,M.J.; Hell,R.;  
**Genomic and functional characterization of the oas gene family encoding O-acetylserine (thiol) lyases, enzymes catalyzing the final step in cysteine biosynthesis in Arabidopsis thaliana**  
 Gene 253(2):237-247 (2000)  
 Medline 20400348  
 Pubmed 10940562

Additional Information

Features

Key	Location	Qualifier	Value
source	1..5340	db_xref	taxon:3702
		mol_type	genomic DNA
		organism	Arabidopsis thaliana
		cultivar	Columbia
mrna	join(1821..1910, 2137..2182, 2270..2379, 2467..2524, 2605..2868, 2960..3097, 3195..3246, 3376..3455, 3563..3622, 3710..3790, 3899..4242)	gene	oasA1
exon	1821..1910	number	1
		gene	oasA1
intron	1911..2136	number	1
		gene	oasA1

exon 2137..2182

cds join(2150..2182,  
2270..2379, 2467..2524,  
2605..2868, 2960..3097,  
3195..3246, 3376..3455,  
3563..3622, 3710..3790,  
3899..3991)

number 2

gene oasA1

db\_xref GOA:P47998

db\_xref UniProt/Swiss-Prot:P47998

gene oasA1

product O-acetylserine (thiol) lyase A1

EC\_number 4.2.99.8

function cysteine synthesis in cytoplasm

protein\_id CAB72932.1

translation

>CAB72932  
MASRIAKDVTELI GNTPLVYLNNVAEGCVGRVAAKLEMME  
GLIKPGESVLI EPTSGNTGVGLAFTAAAKGYKLIITMPAS  
PAKGMKGAIKAE EILAKTPNGYMLQOFENPANPKIHYET  
GTGGTITGAGKYLKEQNANVKLYGVEPVESAILSGGKPGP

intron 2183..2269

exon 2270..2379

intron 2380..2466

exon 2467..2524

intron 2525..2604

exon 2605..2868

intron 2869..2959

exon 2960..3097

intron 3098..3194

exon 3195..3246

intron 3247..3375

exon 3376..3455

intron 3456..3562

exon 3563..3622

intron 3623..3709

exon 3710..3790

number 2

gene oasA1

number 3

gene oasA1

number 3

gene oasA1

number 4

gene oasA1

number 4

gene oasA1

number 5

gene oasA1

number 5

gene oasA1

number 6

gene oasA1

number 6

gene oasA1

number 7

gene oasA1

number 7

gene oasA1

number 8

gene oasA1

number 8

gene oasA1

number 9

gene oasA1

number 9

gene oasA1

number 10

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intron 3791..3898

exon 3899..4242

gene oasA1

number 10

gene oasA1

number 11

gene oasA1

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## Sequence

Characteristics

Sequence

Length: 5340 BP, A Count:1483, C Count:1110, G Count:1079, T Count:1668, Others Count:0

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>emb1|AJ272027|ATH272027 Arabidopsis thaliana oasA1 gene for O-acetyls
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